

State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

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Ms. Adrienne Coit, Clerk Sawyer Lake Village District RFD#6, Box SL-47 Gilmanton, NH 03237 February 14, 2001 Letter of Deficiency DAM #091.01

RE: Sawyer Lake Dam, Gilmanton

Dear Ms. Coit:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on June 14, 2000. During this visual inspection and/or file review, the following deficiencies were observed:

- 1. There were areas of concrete deterioration and cracking on the spillway training walls and stoplog bay piers. Most notably:
 - a.) Upstream face of concrete cut-off wall, approximately 25 feet to the right of the gate operator.
 - b.) Base of left stoplog bay training wall at downstream end.
 - c.) Central concrete pier of stoplog bay.
 - d.) Left stoplog bay training wall on upstream interface with stoplog bay framework.
 - e.) Junction of right concrete cut-off wall and right spillway training wall.
- 2. Seepage was observed at the downstream toe in areas approximately 25 feet to the left of the low level outlet. These areas have been noted on prior inspections and are routinely observed by NHDES dam tenders;
- 3. There was minor leakage through the closed gate as observed through the low-level outlet pipe; and
- 4. There are minor edits that need to be completed to the emergency action plan. The inundation map does not meet EAP requirements as stated in Env-Wr 505.08.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

June 1, 2001:

1. Correct the minor edits required for an updated EAP. Submit a draft inundation map that complies with EAP requirements as stated in Env-Wr 505.08;

November 1, 2001:

 Contact this office to set a date and time, following fall drawdown, to review the areas of concrete that need repair with the DES Dam Maintenance Engineer and Dam Safety Inspector;

http://www.state.nh.us

TDD Access: Relay NH 1-800-735-2964

Letter of Deficiency Dam #091.01 February 14, 2001 Pg. 2

December 1, 2001:

- 3. Repair the areas of concrete deterioration and cracking in the areas noted below:
 - √a.) Upstream face of concrete cut-off wall, approximately 25 feet to the right of the gate operator.
 - X b.) Base of the left stoplog bay training wall at downstream end.
 - x c.) Central concrete pier of stoplog bay.
- crack sealed
- d.) Left stoplog bay training wall on upstream interface with stoplog bay framework.
- e.) Junction of right concrete cut-off wall and right spillway training wall.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

On November 30, 1999, Mr. Robert Dow and other village district members were met at the dam site to review the possibilities for applying for hazard mitigation grant monies to correct erosion problems around the lake. He was informed that this area was out of the Dam Bureau's jurisdiction. However, required improvements to the dam to upgrade the discharge capacity are viable projects for the HMGP grant program. Based on the results of the hydrologic and hydraulic analysis conducted as part of this report, the dam is capable of passing the 100- year storm event but cannot pass the ½ PMF without operation. The Sawyer Village District should seek HMGP assistance if reconstruction of the outlet structure is contemplated.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

Grace E. Levergood, P Dam Safety Engineer

Attachments Guideline for an O&M plan, DB13

cc: Gretchen Rule
Town of Gilmanton

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